SOLICITATION, OFFEROR			OR COMMERC 2, 17, 23, 24, AND	AL II LIVIS	1. REQUISIT 96311M-309	ION NUMBER 1-3749			PAGE 1	OF 10
2. CONTRACT NO.		3. AWARD/EFFE		R NUMBER		5. SOLICITA	TION NUMBER	6	. SOLICITAT	TION ISSUE DATE
DACW31-03-P-022					DACW31-03-T-0053			22-Apr-2003		
7. FOR SOLICITATION INFORMATION CALL:		a. NAME SANDRA L \	WICKS			b. TELEPHO 410-962-	NE NUMBER <i>(No Colle</i> 3987			IE DATE/LOCAL TIME 08 May 2003
9. ISSUED BY		CODE C/	V31	10. THIS ACQU	ISITION IS		11. DELIVERY FO	R FOB 1	2. DISCOL	JNT TERMS
CONTRACTING DIVI	SION			UNRESTR	ICTED		DESTINATION UN	"	% NET 3	0 DAYS
PO BOX 1715	12 1715			X SET ASIDE	100	% FOR	BLOCK IS MARKE			
BALTIMORE MD 2120	J3-17 I5			X SMALL	BUSINESS	3	SEE SCHEDU	LE		
				SMALL	DISADV. E	BUSINESS	13a. THIS CO			ORDER
				8(A)			UNDER DPAS	3 (15 CFR 7	700)	
				SIC: 3594			13b. RATING			
TEL: 410-962-563				SIZE STANDAR	RD:500		14. METHOD OF S			
FAX: 410-962-093	3	1					X RFQ	IFB	1	RFP
15. DELIVER TO PLANNING & ENGR BRA	NCH	CODE E25	0700	16. ADMINISTE				COD	E E1P050	00
DAVID MACGREGOR 5900 MACARTHUR BLVD) NW			PO BOX 1715 BALTIMORE MD 21						
WASHINGTON DC 20315-				BALTIMORE MID 21	203-1715					
17a.CONTRACTOR/O	FFEROR	C	ODE OMCPO	18a. PAYMENT	WILL BE M	IADE BY		COL	DE TOBO)200
JH PROCESS EQUIP	MENT INC			LISACE EINIANI	CE CENTE	-D				
JOHN FEILER	WENT, INC				USACE FINANCE CENTER ATTN: DISBURSING					
617 JEFFERS CIRCL	E			5722 INTEGRI						
EXTON PA 19341				MILLINGTON	TN 38054-	5005				
TEL (440) 050 004	0	FACI COD								
TEL. (410) 658-394				401 OURNALT INVOICES TO ARRESTS OF CHOMBURIER PLOCES AS THE FOR PLOCES						
17b. CHECK IF F		DIFFERENT A	AND PUT	18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED SEE ADDENDUM						
19. ITEM NO.	2	0. SCHEDULE	OF SUPPLIES/ SE	RVICES		21. QUAN	NTITY 22. UNIT	23. UNI	I PRICE	24. AMOUNT
		9	SEE SCHEDULE	=						
25. ACCOUNTING AN	ND APPROPRIAT		LL OOHLDOLI	26. TOTAL AWARD AMO			AMOUNT			
See Schedule										\$15,088.00
27a. SOLICITATIO	ON INCORPORAT	ES BY REFER	ENCE FAR 52.212-1.	52.212-4. FAR 5	52.212-3. 5	2.212-5 ARE	ATTACHED. ADDE	ENDA A	RE ARI	E NOT ATTACHED
27h CONTRACT	DUDCHASE ODE	SED INCORDO	RATES BY REFEREI	JCE EAD 52 212	1 EAD 52	212 5 19 AT	TACHED ADDE		RE∏∆RI	E NOT ATTACHED
									KE AKI	E NOT ATTACHED
28. CONTRACTOR IS			CUMENT AND RETU O FURNISH AND DE			. AWARD OF OFFER DAT	F CONTRACT: REFI		R ON SOL	ICITATION
				LIVER ALL ITEMS SET OFFER DATED . YOUR OFFER ON SOLICITATION NAL SHEETS SUBJECT (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE						
TO THE TERMS A			HEREIN.	1			HEREIN, IS ACCE			
30a. SIGNATURE O	F OFFEROR/CC	NIRACIOR		31a.UNITED	STATES O	F AMERICA	(SIGNATURE OF CON	-	FFICER, 31	
					110	my C.	Robertos			20-May-2003
30b. NAME AND TIT	LE OF SIGNER		30c. DATE SIGNE	_		CTING OFFIC ADDED BY SU		PRINT)		
(TIPE OR PRINT)				TEL: 410-96		IDDED DI DO	EMAIL:			
32a. QUANTITY IN (COLUMN 21 HA	S BEEN		33. SHIP N	JMBER	34. VOU	CHER NUMBER	35. AMOL		
RECEIVED	NSPECTED A	CCEPTED, AN	D CONFORMS TO T		. 1 1			CORR	ECT FOR	l .
			CEPT AS NOTED	PARTIA		AL				
32b. SIGNATURE O	F AUTHORIZEL	GOVI.	32c. DATE	36. PAYME		TE PAR		37. CHECI	K NUMBE	:R
TALL TALBELT THE				38. S/R AC		<u> </u>		IMPED	40 DAID) D)/
41a. I CERTIFY THIS	ACCOUNT IS CO	ORRECT AND	PROPER FOR PAYM		JOUNT NO	MDEK 39	. S/R VOUCHER NU	DIVIDER	40. PAID) BY
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMED 41b. SIGNATURE AND TITLE OF 41c. DATE					42a. RECEIVED BY (Print)					
CERTIFYING OFFICER 42b. RECEIVED AT (Location)										
42c. DATE REC'D (YYIMMIDD) 42d. TOTAL CONTAINERS										
•				420. DATE	KEOD (YY)	(טטוואוויו)	+Zu. TOTAL CONTA	TINERO		

Section SF 1449 - CONTINUATION SHEET

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT 0001 2 Lump Sum \$7.544.00 \$15,088.00

Chemical Bldg Coagulant Pumps

FFP

Two magnetically driven, seal-less centrifugal Coagulant Transfer Pumps in

accordance with the attached specifications. Requestor: David Macgregor @ (202) 764-2799

POC (Contracting Office) Sandy Wicks @ (410) 962-3987

Vendor Rep: John Feiler@ (410) 658-3940

PURCHASE REQUEST NUMBER: 96311M-3091-3749

NET AMT \$15,088.00

ACRN AA Funded Amount \$15,088.00

FOB: Destination

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN INSPECT AT INSPECT BY ACCEPT AT ACCEPT BY 0001 N/A N/A N/A Government

DELIVERY INFORMATION

CLIN DELIVERY DATE QUANTITY SHIP TO ADDRESS UIC

0001 08-MAY-2003 2 PLANNING & ENGR BRANCH

DAVID MACGREGOR

5900 MACARTHUR BLVD NW WASHINGTON DC 20315-0220

(202) 764-2799

FOB: Destination

E250700

ACCOUNTING AND APPROPRIATION DATA

AA: 99 x 9883.0000 E2 x 08 2471 008273 96499 2520 001T15

AMOUNT: \$15,088.00

CLAUSES INCORPORATED BY REFERENCE

52.211-17	Delivery of Excess Quantities	SEP 1989
52.212-4	Contract Terms and ConditionsCommercial Items	FEB 2002
52.219-3	Notice of Total HUBZone Set-Aide	JAN 1999
52.219-6	Notice Of Total Small Business Set-Aside	JUL 1996
52.219-6 Alt I	Notice of Total Small Business Set-Aside (Jul 1996) -	OCT 1995
	Alternate I	
52.222-3	Convict Labor	AUG 1996
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.225-13	Restrictions on Certain Foreign Purchases	JUL 2000
52.232-33	Payment by Electronic Funds TransferCentral Contractor	MAY 1999
	Registration	
52.233-3	Protest After Award	AUG 1996
52.242-15	Stop-Work Order	AUG 1989
52.243-5	Changes and Changed Conditions	APR 1984
52.246-1	Contractor Inspection Requirements	APR 1984
52.247-34	F.O.B. Destination	NOV 1991
52.253-1	Computer Generated Forms	JAN 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	Required Central Contractor Registration	NOV 2001
252.219-7011	Notification to Delay Performance	JUN 1998
252.225-7001	Buy American Act And Balance Of Payments Program	MAR 1998
252,225-7002	Qualifying Country Sources As Subcontractors	DEC 1991
252.225-7009	Duty-Free EntryQualifying Country Supplies (End Products	AUG 2000
	and Components)	
252.225-7016	Restriction On Acquisition Of Ball and Roller Bearings	DEC 2000
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.246-7000	Material Inspection And Receiving Report	DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (APR 2001) (DEVIATION)

(a) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (a) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-5, Audit and Records-Negotiation.

- (1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.
- (2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
- (3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (b) The Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components—
- (1) 52.222-26, Equal Opportunity (E.O. 11246);
- (2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);
- (3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and
- (4) 52.247-64, Preference for Privately-Owned U.S.- Flag Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).
- (5) 52.222-41, the Service Contract Act as Amended (41 U.S.C. 351, et seq.) Subcontracts for certain commercial services may be exempt from coverage if they meet the criteria in FAR 22.1103-4(c) or (d) (see DoD class deviation number 2000-O0006).

(End of clause)

52.223-11 OZONE-DEPLETING SUBSTANCES (MAY 2001)

- (a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as--
- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
- (2) Class II, including, but not limited to, hydrochlorofluorocarbons.
- (b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:
- "WARNING: Contains (or manufactured with, if applicable), a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere."------

The Contractor shall insert the name of the substance(s).

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://farsite.hill.af.mil

(End of clause)

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any _____ (48 CFR _____) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (APR 2001) (DEVIATION)

(a) In addition to the clauses listed in paragraph (b) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items (DEVIATION) clause of this contract, the Contractor shall include the terms of the following clause, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014	Preference for Domestic Specialty Metals, Alternate I (MAR 1998) (10
	U.S.C. 2533a).
252.247-7023	Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631)
252.247-7024	Notification of Transportation of Supplies by Sea (MAR 2000) (10
	U.S.C. 2631)

(End of clause)

SPECIFICATIONS

COAGULANT TRANSFER PUMPS

PART 1 - GENERAL

- 1-1. <u>SCOPE</u>. This procurement spec covers the supply of two magnetically driven, sealless centrifugal pumps.
- 1-2. <u>GENERAL</u>. Each pumping unit shall be complete with a pump, electric motor, flexible coupling, pedestal, sub-base, anchor bolts, and all other appurtenances specified or otherwise required for proper operation. Power supply to equipment will be 480 volts, 60 Hz, 3 phase.
- 1-3. <u>SUBMITTALS</u>. Complete fabrication, assembly, foundation, and installation drawings, together with detailed specifications and data covering materials, parts, devices, and accessories forming a part of the equipment furnished, shall be submitted. The data and specifications for each unit shall include, but shall not be limited to, the following:

<u>Pumps</u>

Name of manufacturer.

Type and model.

Rotative speed.

Size of suction and discharge ports.

Net weight of pump and total unit.

Complete performance curves showing capacity versus head,

NPSH required, efficiency, and brake horsepower.

Motors

Name of manufacturer.

Type and model.

Type of bearings and method of lubrication.

Rated size of motor, hp.

Temperature rating.

Full load rotative speed.

Efficiency at full, 3/4, and 1/2 load.

Full load current and locked rotor current.

PART 2 - PRODUCTS

2-1. <u>SERVICE CONDITIONS</u>.

Each pumping unit shall be of the non-metallic, magnetically coupled, synchronous drive, seal-less centrifugal pump rated for 150 gpm at 100 ft of TDH when pumping Aluminum sulfate with net positive suction head (NPSH) of 9.3 and fluid specific gravity of 1.34. The new pumps will replace existing ANSIMAG pumps model K326-CB x 5.5 and shall be as manufactured by ANSIMAG or approved equal. The new pumping units shall fit in the existing pump location and connect to the existing suction and discharge lines without requiring major modification.

2-2. <u>PERFORMANCE AND DESIGN REQUIREMENTS</u>. Each pumping unit shall be designed for the following operating conditions:

Number of units	2
Rated TDH with NPSH of 9.3, feet	100
Capacity at rated head, gpm	150
Specific Gravity of Liquid	1.34
Viscosity, SSU	25

pH 3.0

NPSHa, feet FLOODED (varies)

Min. pump efficiency at rated head, % 65

Operating temperature range, F -20 to 110

Maximum slurry size, inches 0.005

Maximum slurry content, % 5

Maximum solid diameter, inches 1/32

Max (nominal) pump operating

speed at rated head, rpm 3600

Motor horsepower, hp 10

Pump nozzle size, inches

Suction 3 Discharge 2

Nominal impeller diameter, inches 5.5

Pump performance shall be stable and free from cavitation and noise throughout the operating head range.

2-3. MATERIALS.

Casing: Solid ductile iron casing lined with rotomolded ETFE lining.

Impeller Carbon fiber filled with ETFE fluoropolymer.

Shaft Silicon carbide

Magnets Neodymium Iron Boron

Rear Casing CFR ETFE with composite cover

2-4. PUMP CONSTRUCTION.

2-4.01. <u>Casing Assembly</u>. The casing shall meet ANSI B73.1-1991 foot and flange position and size standard. The casing assembly shall be self-venting and top centerline discharge.

- 2-4.02. <u>Impeller</u>. The impeller shall be enclosed, one-piece injection molding of carbon fiber reinforced ETFE, non-metallic construction with fully encapsulated magnets. Impeller shall be a replaceable type with press-fit main bushing.
- 2-4.03. <u>Shaft</u>. Shaft shall have a minimum 1.25: diameter. The one piece, solid construction, sintered silicon carbide shall be non-rotating, fully supported at both ends utilizing front shaft support and rear casing. Shaft shall be provided with axial groove for improved lubrication and particulate bypass.
- 2-4.04. Rear Casing. Rear casing construction shall be per ANSI/ASME B73.1 Pressure and Temperature rating for Class 150 flanges. Rear casing shall be constructed of the same material as the impeller, minimum 0.100" thickness. Rear casing burst pressure shall be 6 times rated pressure. Or 1,700 psi minimum. The design of the rear casing shall eliminate additional energy loss due to eddy currents from magnetic coupling.
- 2-5. ACCESSORIES. Each pump shall be provided with lifting eyebolts or lugs.

- 2-6. <u>BALANCE</u>. All rotating parts shall be accurately machined and shall be in as nearly perfect rotational balance as practicable. Excessive vibration shall be sufficient cause for rejection of the equipment. The mass of the unit and its distribution shall be such that resonance at normal operating speeds is avoided.
- 2-7. <u>DRIVE MOTORS</u>. Each pumping unit shall be provided with a single speed motor confirming to NEMA MG 1 and UL 1004 for motors. Power supply to the motors shall be 480 volts, 3 phase, 60 Hz.

PART 3 - EXECUTION

3-1. PUMP INSTALLATION. Installation will be by others.

End of Section